Before the
Federal Communications Commission
1919 M St., N.W.
Washington, D.C. 20554

COMMENT ON ACTA PETITION RELATING TO "INTERNET PHONE" SOFTWARE AND HARDWARE	)))	RM No. 8775.

COMMENTS OF THE CONSUMER PROJECT ON TECHNOLOGY ON THE ACTA PETITION RELATING TO "INTERNET PHONE" SOFTWARE AND HARDWARE

1. The Consumer Project on Technology (CPT) is a non-profit organization which was started by Ralph Nader to promote consumer interests in matters concerning the development of new technologies, including information technologies. CPT has filed comments with the FCC in a number of dockets, including those relating to universal service, inside wiring for cable systems, policies for allocation of DBS frequencies, network access fees for ISDN services, and other topics. For additional information about CPT see our Web page at http:/www.essential.org/cpt.

2. CPT urges the Commission to reject the March 4, 1996, America's Carriers Telecommunication Association (ACTA) Petition which asks the FCC to declare that Internet telephony is a regulated telecommunications service subject to FCC jurisdiction. The ACTA petition raises serious issues, but the suggested relief is wrong. The FCC should not take actions designed to make the Internet operate more like the public switched telephone network. The FCC should take steps to modify the current scheme of regulation for the public switched telephone network in order to make it a more efficient network for data transmissions.

3. The very first priority is to re-evaluate today's system of supporting local loop costs with hefty per-minute usage charges from long distance telephone calls. If the current 5.7 cents per-minute long distance usage charges that support the local loop are imposed on Internet users, it will wreck havoc with the Internet, not only by substantially raising the costs of Internet usage, but also by creating the need for a vast system of accounting and control to accommodate the FCC's current system of charges for sending AND receiving calls.

4. The Internet is the average consumer's data network. Large businesses are permitted to build private telecommunications systems that provide services which are cheaper and have different functionality than the public switched network. Some of the exodus from the public switched network is driven by regulatory anomalies, and some is driven by the need to develop new network architectures. The Internet is only one of many networks which has been developed and designed to provide services that the monopoly Local Exchange Carrier (LECs) cannot or will not provide.

5. Clumsy efforts to impose requirements for surveillance of the Internet (in order to stop Internet telephony) or to impose per minute fees to support local loop costs would place the average consumer at a significant disadvantage to the large firms that operate networks that would not be so regulated. Small firms that use the Internet for commercial purposes would face yet another barrier to access to cost effective network services.

6. Residential consumers have been very poorly served by the monopoly LECs. It is a modern scandal that the LECs are still selling residential analog telephone connections in markets where the central office and lines are ISDN capable. The LECs deployed digital switches and ISDN Centrex to business customers in order provide feature rich Centrex services that would compete against the competitive PBX providers, for the business voice market. Meanwhile residential consumers have a hard time even ordering ISDN services, and then they face extraordinarily high prices for the service. Companies like Nynex, Bell Atlantic, PacBell and US West are trying to charge residential consumers from 2 to 6 cents per minute to use residential ISDN lines, even in off-peak hours. The LECs have used one set of cost studies for business ISDN voice Centrex, which says that ISDN basically costs the same as POTS, and another set of cost studies that assert that residential ISDN is between 4 and 100 times as expensive as POTS. It is not surprising that the LECs are reportedly urging the FCC staff to support new per-minute charges for residential consumers who connect to the Internet over a telephone line.

7. The Internet is a data network which is based upon packet switching. The pricing for Internet services has developed in the competitive market. Consumers have many choices at the retail level. One sees per-hour or per-minute fees, blocks of time, and flat rates for unlimited usage. At both the retail and the wholesale level one often finds prices that are based upon capacity, as measured by bandwidth, rather than actual usage measured by time or bits.

8. Like many data networks, the Internet suffers from poor performance when it is congested. This is a significant concern to Internet users. There is no current mechanism to use prices to better manage Internet congestion. Some persons incorrectly suggest that per-minute fees for Internet traffic would address this problem. But this is clearly not true. Per-minute fees would only discourage usage, not reduce congestion. Data networks that have per-minute charges continue to suffer during periods of peak usage. American Online, for example, charges by the minute, and the performance of the network suffers during hours of peak usage.

9. Pricing schemes which recover costs based upon usage only lead to inefficiencies, when most of the network costs are fixed. The long distance public switched telephone network is a prime example of this problem. The public switched telephone network is typically slack in the evenings and weekends, with huge over capacity. Because of the 24 hour per day 5.7 cents per-minute fees for local loop access, the long distance carriers cannot offer consumers flexible packages for service, such as free calling on weekends or selected week days.

10. In the public switched telephone network, all "long distance" calls are metered by the minute, in order to pay the very large per-minute local-loop usage fees. Consequently, with prices set far in excess of marginal costs, the public switched network is very underutilized during off-peak hours. Additional off-peak usage of the public switched telephone network doesn't consume more resources, since the network costs are fixed. This pricing system results in an inefficient use of the network resources.

11. The pricing system which has evolved via the competitive market for the Internet and other private data networks is significantly different than the one developed through interactions between monopoly carriers and regulators. The per-minute charging model is based upon monopoly power and an older idea of how the network is used.

12. The task for regulators is to change regulatory structure for the public switched telephone network, to one that recognizes the need to use network resources more efficiently.

13. The Internet represents a very important laboratory for a new public network. The Internet is facing important problems as it attempts to increase its scale, and demands on its resources increase at an exponential rate. But it is pre-mature to impose upon the Internet a regulatory regime which is outdated and inefficient.

14. The fact that commercial Internet providers can provide residential consumers with remote telecommunications services for less than 50 cents per hour (less than one sixth the per-minute local loop access charges) is largely due to the more efficient nature of Internet communications, which include such important features as more intensive network usage and lower overhead due to the lack of massive accounting and billing systems for Internet traffic. There is a lesson to be learned here.

15. While the Internet struggles to deal with congestion, regulators should search for new tools for dealing with bandwidth management that depend upon something other than per-minute or per-bit metering schemes which typically lead to under utilization of the fixed cost network.

16. AT&T, Intel, CPT and others are urging state regulators to put pressure on LECs to develop new mechanisms for bandwidth management. This issue has developed over debates over ISDN pricing. Several LECs have tried to justified outrageous residential ISDN tariffs based upon assertions that residential consumers may sometime in the future "nail up" network resources. Consumers and the computer and software industry groups note that this hasn't happened even in states with flat rate ISDN tariffs, but suggest that the LECs be required to report back to regulators with proposals for bandwidth management that would permit more efficient use of digital networks.

17. Many computer and software firms are trying to develop standards for Bandwidth Allocation Control Protocol (BACP), which would be used for better management of ISDN B channels. Even better would be modifications in the public switched telephone software that would allow consumers to have open digital network connections using the already open D channel, which is now used for signally, while opening up additional B channels as needed, in a bandwidth on demand system.

18. The Internet Engineering Task Force (IETF) is looking at other models for management of Internet congestion. Generally speaking, there is more interest in finding ways to allocate routing priorities or to address specific problems with congestion than there is in turning to round-the-clock per-minute or per-bit charges. Usage and congestion are clearly not synonymous.

19. It is absolutely essential that the FCC and other regulators come to grips with their own inefficient regulatory models before they attempt to impose new regulatory schemes on the Internet, which continues to provide a highly cost effective and popular service millions of consumers.

May 8, 1996

Sincerely,

James Love
Director, Consumer Project on Technology
love@tap.org; http://www.essential.org/cpt
voice: 202/387-8030; fax 202/234-5176

cc: rm8775@fcc.gov